REMARKS

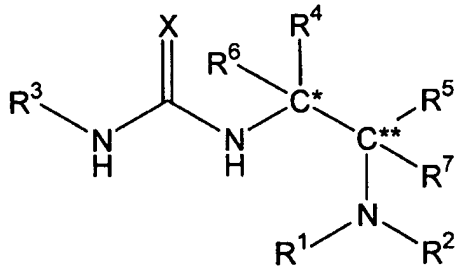
Reconsideration and allowance of the subject application are respectfully requested. Claims 1, 3-5 and 17-19 are all the claims pending in the application. Claims 1, 3-5, 17 and 19 are rejected. Claim 18 is allowed.

Claim Rejections under 35 U.S.C. § 103

Referring to Paragraph No. 5 at page 2 of the Office Action, Claims 1, 3-5, 17 and 19 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Pandey et al., Pharmacological Research Communications, 1981, vol. 13, No. 1, pages 65-74 (hereinafter "Pandey").

Applicants traverse and respectfully request the Examiner to reconsider in view of the following remarks.

The present invention relates to a novel asymmetric urea compound useful as a catalyst for asymmetric synthesis and is characterized by a compound represented by the formula (I):

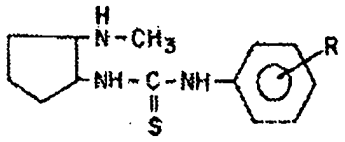


(I)

wherein X is a sulfur atom; C^* and C^{**} are each independently an asymmetric carbon; R^1 and R^2 are the same or different and each is methyl, ethyl or isopropyl, or form isoindoline together with the nitrogen atom they are bonded to; R^3 is a lower alkyl group optionally having substituent(s), an aralkyl group optionally having substituent(s), an aryl group optionally having substituent(s) or a heteroaryl group optionally having substituent(s); R^4 and R^5 are the same or different and each is a lower alkyl group optionally having substituent(s), an aralkyl group optionally having

substituent(s) or an aryl group optionally having substituent(s), or R^4 and R^5 optionally form, together with the asymmetric carbons they are respectively bonded to, a homocyclic ring optionally having substituent(s) or a heterocycle optionally having substituent(s); and R^6 and R^7 are the same or different and each is a hydrogen atom or a lower alkyl group optionally having substituent(s), or a salt thereof.

The Examiner cites Pandey as disclosing the following compound:



where R is H, methyl, -OMe or Cl.

The Examiner indicates that it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to determine the appropriate ring size or chemical constituents from Pandey's genus structural limitations to arrive at Applicant's compounds with a reasonable expectation of success.

The Examiner's attention is directed to MPEP § 2144.09, section VI which states that if prior art compounds have no utility, or utility only as intermediates, claimed structurally similar compounds may not be *prima facie* obvious over the prior art.

In this case, Pandey's compound is an intermediate in the production of N-methyl-N-2-[1-(1-arylthiocarbamido)]cyclopentyl nitrobenzamides. In the Abstract, Pandey discloses that N-methyl-N-2-[1-(1-arylthiocarbamido)]cyclopentyl nitrobenzamides were synthesized and evaluated for their anticonvulsant activity and potentiation of pentobarbital-induced hypnosis. Additionally, Pandey discloses that these compounds were investigated for their ability to inhibit in vitro respiratory activity during oxidation of pyruvic acid and monoamine oxidase activity of

rat brain homogenates. However, no teaching is provided for any utility of Pandey's compound disclosed in the Action except as an intermediate in the production of the N-methyl-N-2-[1-(1-arylthiocarbamido)] cyclopentyl nitrobenzamides.

The Federal Circuit reviewed the patentability of a compound in view of a prior art intermediate in Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc., 520 F.3d 1358 (Fed. Cir., Mar. 31, 2008). The Federal Circuit concluded that obviousness exists only when there is a finite (and small in the context of the art) or easily traversed number of options to test. In view of Ortho-McNeil, it is respectfully submitted that the present claimed compounds would not have been *prima facie* obvious over Pandey's intermediate compound.

In the present case, a person of ordinary skill in the art would not be likely to start with a reference disclosing N-methyl-N-2-[1-(1-arylthiocarbamido)]cyclopentyl nitrobenzamides, an enzyme inhibitor. Beyond that step, however, the ordinarily skilled artisan would not have any reason to select (among several unpredictable alternatives) the exact synthesis route to make the N-methyl-N-2-[1-(1-arylthiocarbamido)] cyclopentyl nitrobenzamides that produced Pandey's compound as an intermediate, which would still not even be within the scope of the instant claims. Even beyond that, the ordinary artisan would not stop at the intermediate and test it for properties far afield from the purpose for the development in the first place (catalyzing asymmetric synthesis rather than enzyme inhibition).

In sum, this is not a case in which there exists an easily traversed, small and finite number of alternatives that might support an inference of obviousness. On the contrary, these are multiple synthesis routes (see, for example, the seven compounds in Table 1).

Furthermore, even with respect to those, they do not arrive the present claimed compounds, as the Examiner admits. Accordingly, it is respectfully submitted that the present invention is patentable over Pandey.

For at least the above reasons, Applicants respectfully request reconsideration and withdrawal of the § 103(a) rejection of claims 1, 3-5, 17 and 19 based on Pandey.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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